## **Question1:**

A university's Office of Admission keeps track of student majors. Each student can have a single major. Below is an example of how their system stores students, majors, and how it manipulates them:

```
students = [("Allen Anderson", "Computer Science"),
("Edgar Einstein", "Engineering"),
("Farrah Finn", "Fine Arts")]
def add_new_student(students, name, major):
    students.append((name, major))
# students[len(students)] = (name, major)
def update_student(students, index, name, major):
    students[index] = name, major
def find_students_by_name(students, name):
    return [student for student in students if name in student[0]]
def get_all_majors(students):
    return [student[1] for student in students]
```

## **Solution:**

What can be concluded from the code snippet above? (Select all acceptable answers.)

- 1. In the update\_student function, the '(' and ')' parentheses can be removed without causing any errors.l
- --True
- 2. Calling find\_students\_by\_name(students, 'in') returns a list of 2 tuples.
  - -- True [('Edgar Einstein', 'Engineering'), ('Farrah Finn', 'Fine Arts')]
- 3. The add\_new\_student function can be rewritten as seen below and still maintain identical functionality: students[len(students)] = (name, major)
- --False (list assignment index out of range )

- 4. Calling get\_all\_majors(students) returns a list of 3 tuples.
- --False
- 5. The add\_new\_student function adds a new student in the last place in the list.
- --True
- 6. The name of the first student in the array can be set to the new\_name variable, like

students[0][0] = new\_name

-False ('tuple' object does not support item assignment)